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# United States Department of Agriculture

## AGRICULTURAL MARKETING SERVICE

### SERVICE AND REGULATORY ANNOUNCEMENTS NO. 172

## OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER SWINE (BARROWS AND GILTS)

(Title 7, Ch. I, Pt. 53, Sections 53.150-53.153 of the Code of Federal Regulations)

The following is a reprint of the official United States standards for the grades of slaughter barrows and gilts promulgated by the Secretary of Agriculture under the Agricultural Marketing Act of 1946 (60 Stat. 1087; 7 U. S. C. 1621 et seq.) and other authority. The standards are reprinted as amended effective July 5, 1955.

### DEVELOPMENT OF THE STANDARDS

A system of classifying and grading market hogs was formulated by the United States Department of Agriculture in 1918 for use in the livestock market reporting service. The system was developed with the cooperation and assistance of many interested agencies and represented the most generally accepted market groupings of the time. After meetings with producers, animal husbandmen, market representatives, and slaughterers in 1928 and 1929, revisions were made, consistent with changes in production and marketing conditions, and tentative standards were issued in 1930. Further revisions were incorporated into the tentative standards in 1940 when they were published in Circular No. 569.

The United States Department of Agriculture proposed new standards for grades of slaughter barrows and gilts in 1949. Field testing, discussion, and demonstration of the standards resulted in slight revisions before promulgation, by the Secretary of Agriculture, as the official United States standards for grades of slaughter barrows and gilts, effective September 12, 1952.

The official standards were amended in July, 1955, by changing the grade designations Choice No. 1, Choice No. 2, and Choice No. 3 to U. S. No. 1, U. S. No. 2, and U. S. No. 3, respectively. In addition, the degree of finish or fatness was reduced for each grade and the descriptive specifications were reworded slightly to reflect the reduced degrees of finish and to facilitate more uniform interpretation of the standards.

### BASES FOR SWINE STANDARDS

The market standards for swine developed by the United States Department of Agriculture provide for segregation according to (a) intended use, as slaughter or feeder and stocker animals, (b) class, as determined by sex condition, and (c) grade, or degree of excellence and suitability for a particular purpose.

### SLAUGHTER SWINE CLASSES

There are five classes of slaughter swine—barrows, gilts, sows, stags, and boars.

#### BARROW

A barrow is a male swine castrated when young and before development of the secondary physical characteristics of a boar.

#### GILT

A gilt is a young female swine that has not produced young and has not reached an advanced stage of pregnancy.

#### SOW

A sow is a mature female swine that shows evidence of having reproduced or has reached an advanced stage of pregnancy.

## STAG

A stag is a male swine castrated after development or beginning of development of the secondary physical characteristics of a boar. Typical stags are somewhat coarse and lack balance—the head and shoulders are more fully developed than the hindquarter parts, bones and joints are large, the skin is thick and rough, and the hair is coarse.

## BOAR

A boar is an uncastrated male swine.

## APPLICATION OF STANDARDS FOR GRADES OF SLAUGHTER BARROWS AND GILTS

In the barrow and gilt classes, sex condition has exerted little effect on secondary physical characteristics, and barrows and gilts are treated as a single class in marketing and for standardization purposes. Therefore, the grade standards are equally applicable to both slaughter barrows and gilts.

The standards are based on the standards for grades of barrow and gilt carcasses. The two major factors forming the bases for the grades are (1) differences in yield of lean cuts and of fat cuts, and (2) differences in quality of cuts. There are rather consistent variations in these characteristics from one grade of barrows and gilts to another. U. S. No. 1 grade barrows and gilts have about the minimum finish required to produce pork cuts of acceptable quality in which the lean is firm and has sufficient marbling, or fat interspersed within the lean, to result in the tenderness, juiciness, and flavor associated with desirable palatability. U. S. No. 2 grade barrows and gilts are overfinished and U. S. No. 3 grade barrows and gilts are decidedly overfinished in relation to the minimum finish required for the production of cuts of acceptable quality; yields of lean are lower and yields of fat are higher in these grades than in U. S. No. 1 grade. Medium grade barrows and gilts are underfinished, and although the ratio of lean to fat is higher than in U. S. No. 1 grade, the lean is soft and has little or no marbling. Cull grade barrows and gilts are decidedly underfinished and the pork is soft and watery with no visible evidence of marbling in the lean.

Application of the standards requires an accurate appraisal of the live animal characteristics which indicate the grade. The standards describe the characteristics of typical animals having the minimum degree of finish for each grade. No attempt is made to describe the numerous combinations of characteristics that may qualify an animal for a specific grade, and making appropriate compensations for varying combinations requires the use of sound judgment.

The general limits of grades for barrows and gilts are determined by degree of finish, but other factors are considered in certain cases to accomplish further refinement of the grades. Animals at the borderlines between grades with respect to degree of finish are graded by consideration of meatiness as evidenced by thickness and fullness (fat covering considered) of hams, loins, shoulders, and bellies; apparent firmness of fleshing; and distribution of fat covering. The application of these compensating factors is limited to borderline cases between grades, and in no case is the final grade of an animal more than one-half the width of a grade different than that indicated by apparent degree of finish.

## SPECIFICATIONS FOR OFFICIAL UNITED STATES STANDARDS FOR GRADES OF SLAUGHTER BARROWS AND GILTS

## U. S. NO. 1

Slaughter barrows and gilts in this grade have an intermediate degree of finish. Hogs of the minimum finish for U. S. No. 1 are moderately wide over the top, and width of body over the top appears nearly equal to that at the underline. The back, from side to side, is moderately full and thick and usually appears well-rounded and blends smoothly into the sides. Width through the hams is usually nearly equal to width through the shoulders. The sides are moderately long, slightly thick, and usually smooth; the flanks are slightly thick and full. Depth at the rear flank may be slightly less than depth at the fore flank. Hams tend to be moderately thick and full with a slightly thick covering of fat. Jowls are moderately full and thick but are usually trim. Barrows and gilts in this grade produce U. S. No. 1 carcasses. Barrows and gilts with apparent degree of finish typical of the fatter one-half of the U. S. No. 1 grade but with the evidences



of meatiness, firmness of fleshing, and distribution of finish more nearly typical of the U. S. No. 2 grade shall be graded U. S. No. 2.

#### U. S. NO. 2

Slaughter barrows and gilts in this grade have a moderately high degree of finish. Hogs of the minimum finish for U. S. No. 2 are wide over the top, and width of body appears slightly greater over the top than at the underline. The back, from side to side, is full and thick and often appears slightly flat with a noticeable break into the sides. Width may be slightly greater through the shoulders than through the hams. The sides are slightly short, moderately thick, and smooth; the flanks are moderately thick and full. Depth at the rear flank is nearly equal to depth at the fore flank. Hams tend to be thick and full with a moderately thick covering of fat, especially over the lower part. Jowls are usually full and thick, and the neck appears rather short. Barrows and gilts in this grade produce U. S. No. 2 carcasses. Barrows and gilts with apparent degree of finish typical of the fatter one-half of the U. S. No. 2 grade but with the evidences of meatiness, firmness of fleshing, and distribution of finish more nearly typical of the U. S. No. 3 grade shall be graded U. S. No. 3. Those with apparent degree of finish typical of the thinner one-half of the U. S. No. 2 grade but with the evidences of meatiness, firmness of fleshing, and distribution of finish more nearly typical of the U. S. No. 1 grade shall be graded U. S. No. 1.

#### U. S. NO. 3

Slaughter barrows and gilts in this grade have a high degree of finish. Hogs possessing the minimum finish for U. S. No. 3 are very wide over the top, and width of body appears somewhat greater over the top than at the underline. The back, from side to side, is very full and thick and often appears nearly flat with a pronounced break into the sides. Width may be greater through the shoulders than through the hams. The sides are short, thick, and smooth; the flanks are thick and full. Depth at the rear flank is equal to depth at the fore flank. Hams tend to be very thick and full with a thick covering of fat, especially over the lower part. Jowls are very thick and full, and the neck appears short. Barrows and gilts in this grade produce U. S. No. 3 carcasses. Barrows and gilts with apparent degree of finish near the minimum for U. S. No. 3 grade but with evidences of meatiness, firmness of fleshing, and distribution of finish more nearly typical of the U. S. No. 2 grade shall be graded U. S. No. 2.

#### MEDIUM

Slaughter barrows and gilts in this grade have a low degree of finish. Hogs of the minimum finish for the grade are moderately narrow over the top, and width over the top appears less than at the underline. The back, from side to side, is slightly thin and appears rather peaked at the center, especially at and immediately behind the shoulders, with a distinct slope toward the sides. Hips may appear slightly prominent. Width may be slightly less through the shoulders than through the hams. The sides are long, moderately thin, and wrinkled; the flanks are thin. Depth at the rear flank is less than depth at the fore flank. Hams tend to be thin and flat with a slight taper toward the shanks. Jowls are usually slightly thin and flat, and the neck appears rather long. Barrows and gilts in this grade produce Medium grade carcasses.

#### CULL

Slaughter barrows and gilts in this grade have a very low degree of finish. Hogs with the fleshing typical of the grade are narrow over the top, and width of body appears somewhat less over the top than at the underline. The back, from side to side, is thin, lacks fullness, and appears peaked at the center with a decided slope toward the sides. The hips are prominent. Width may be somewhat less through the shoulders than through the hams. The sides are very long, thin, and wrinkled; the flanks are very thin. Depth at the rear flank is considerably less than depth at the fore flank. Hams are very thin and flat with a decided taper toward the shanks. Jowls are usually thin and flat, and the neck appears long. Barrows and gilts in this grade produce Cull grade carcasses.

